AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claim 1 (Cancelled).

Claim 2 (Previously Presented): A micro electro-mechanical system for indicating the presence of metallic debris particles within a body of fluid, comprising: sensor means positioned within an enclosure containing said body fluid for detection of the metallic debris particles in response to selectively controlled supply of energy thereto; and indicator means connected to the sensor means for monitoring density measurements of the debris particles detected within the body of fluid; said sensor means comprising: cantilever means mounted within the body of fluid for undergoing vibratory motion therein; electrically powered means establishing an electromagnetic field within the body of fluid in underlying relation to the cantilever means for inducing said vibratory motion and magnetically attracting the metallic debris particles thereto causing changes in resonant frequency of the vibratory motion reflected by said density measurements.

Claim 3 (Original): The system as defined in claim 2, wherein said body of fluid is undergoing flow in surrounding relation to the sensor means within the enclosure, with the metallic debris particles suspended within the body of fluid.

Claim 4-5 (Cancelled).

Claim 6 (Previously Presented): A micro electro-mechanical system for indicating the presence of metallic debris particles within a body of fluid, comprising: a pipe forming an enclosure through which said body of fluid undergoes flow; sensor means positioned within said enclosure containing said body of fluid for detection of the metallic debris particles in response to selectively controlled supply of electrical energy thereto; and indicator means connected to the sensor means for monitoring density measurements of the debris particles in response to said detection thereof within the body of fluid; said sensor means comprising: cantilever means mounted within the pipe for undergoing vibratory motion; electrically powered means establishing an electromagnetic field within the body of fluid in underlying relation to the cantilever means for inducing said vibratory motion and magnetically attracting the metallic debris particles thereto causing changes in resonant frequency of the vibratory motion reflected by said density measurements.

Claim 7 (Original): The system as defined in claim 6, wherein said cantilever means comprises: a support on which the electrically powered means is positioned within the pipe; and a plurality of cantilever beams of different lengths anchored to the support in overlying relation to the electrically powered means.

Claim 8 (Original): The system as defined in claim 7, wherein the electrically powered means comprises: magnetic coils.